

In the Claims:

Please amend claim 10 as indicated below.

Please add new claims 20-23 as indicated below.

This listing of claims will replace all prior versions, and listings, of claims in the application.

1.-9. (Cancelled)

10. (Currently amended) DNA encoding a chimeric isoprenoid sesquiterpene synthase polypeptide, wherein said chimeric isoprenoid synthase polypeptide comprises a first isoprenoid synthase polypeptide joined to a second different isoprenoid synthase polypeptide such that the chimeric isoprenoid sesquiterpene synthase polypeptide encoded by the DNA catalyzes: (1) the production of at least one isoprenoid reaction product that is not produced in the absence of the second isoprenoid synthase polypeptide; or (2) the production of more than one isoprenoid reaction product in a ratio differing from the ratio of the products produced in the absence of the second isoprenoid synthase polypeptide.

11. (Original) A vector comprising the DNA of claim 10.

12. (Original) A cell comprising the DNA of claim 10.

13. (Original) The cell of claim 12, wherein said cell is *E. coli*.

14. (Original) The cell of claim 12, wherein said cell is a plant cell.

15. (Previously Presented) A transgenic plant comprising the DNA of claim 10.

16. (Previously presented) A vector comprising the chimeric isoprenoid synthase gene of claim 10 and a dominant selectable marker.

17. (Previously presented) The vector of claim 16 further comprising additional elements selected from the group consisting of a promoter regulatory region, a transcription initiation start site, a ribosome binding site, an RNA processing signal, a transcription termination site, and a polyadenylation agent.

18. (Previously presented) The vector of claim 11 comprising a transcription initiation regulatory region.

19. (Previously presented) The vector of claim 11 comprising a transcription termination regulatory region.

20. (New) The DNA of claim 10 wherein the chimeric isoprenoid synthase polypeptide encoded by the DNA includes therein a DDXXD motif.

21. (New) A vector comprising the DNA of claim 20.

22. (New) The DNA of claim 10 wherein the chimeric isoprenoid synthase polypeptide encoded by the DNA includes therein two chimeric isoprenoid synthase polypeptides.

23. (New) A vector comprising the DNA of claim 22.